** 2007.02.06 Meeting

*** News

New shift schedule is out.

No new releases. No releases planned, but there is a new version of Omniorb and add a command to display DB server connections.

*** D0

See mail from Kin.

There's a user that can't get files, but works fine for Robert. Complaint that parent files for certain derived files have disappeared (not on tape and not on disk). They are not intermediate files. SAM has no location and the files are not in pnfs — this looks like deliberate removal (or they were on a durable location and never saved to tape), but meta-data are there and they have derived files. Perhaps search the issue tracker for those file names.

Can ask Dave Berg if these files were ever on tape. Since this is an MC request, guessing that the files never made it to tape. Do these files have a CRC in the meta-data?

Turning of storing event catalog today as of 9:13am! Then can move DLSAM DB server to linux.

905 9940A tapes available to recycle. $\sim 120~\text{A/s}$ need to be checked (file names don't match what is in SAM ???). 100 9940B's can be recycled. The recycling process is happening now.

Online problem - dlsam's encp wrapper stopped working. Could not write a file to a directory (log files go to nfs mounted directory (!!!)). Dehong could touch a file in the directory as user sam, but not the wrapper. Killed the wrapper and let run without it for the weekend. Started it again on Monday and it worked!

*** CDF

See mail

Unresolved issue - tape stuck in one of the movers (from the weekend) - tape is NOACCESS.

SAM station in Italy had an expired certificate, but still had problems because the CA certificate changed, and that wasn't in sam-gsi-config. Parag added. dCache had to change too add the new CA. This required manual intervention, but perhaps not in the future.

 $48\ \text{MC}$ showed up on a couple nodes as being corrupted (they had been there forever, but Angela was able to get people to remove them).

Four other movers had problems over the week, and are no running ok.

Marked 450 files in SAM as bad.

Flood of messages from an enstore test node in dCache, but not a real problem.

Problem with CAF over the weekend. CAF was restarting sections (not clear why). Problem seems to be resolved. Problem had been ongoing for four days. Manpower for CAF is low right now.

Release problem - possible methd: looks like when an exception is thrown file is released with bad status and that generates another exception. Perhaps a CAF problem.

TSam problem from Charles Plager - apparently nothing had changed to make Charles' problems. Thomas will be on shift next week.

Will generate a list of tapes to move from CDF silo to D0 silo.

*** MINOS

See mail.

For MC import - many slow transfers to the same disk leads to fragmented disks. !!! How do you precreate a file in unix? Randolph has the answer "dd and /dev/zero". Then just write on top of it with the same name.

See dCache report. Change of month problem at 0000 UTC. Causes files

to remain in buffer. dCache developers are looking into it.

Give suggestions to dCache people on how to allocate pools.

*** DB

See mail. Will monitor D0 events catalog to ensure no new data are added. Will do one file backup. Will make a plan for truncation of the data

Patches will occur in March.

No more D0 corruptions.

No CDF connection problems - but CDF load is light now.

*** enstore/dCache

See mail. D0 silo position calibration marks get dusty and that causes the robot to stop when it can't see the marks.

From: Kin Yip <kinyip@bnl.gov>

Subject: DO SAM shift report Jan. 30 - Feb. 6, 2007

To: sam-design@fnal.gov, Daria Zieminska <daria@indiana.edu>

Date: Mon, 05 Feb 2007 17:26:23 -0500

Report on behalf of Daria:

1. Due to certificate authentication problems, the shifters can't really do the job submission for MC requests (until the problems are fixed).

2. The D0 Enstore PNFS server d0ensrv1 has suffered a processor failure. It was replaced now on Jan. 31, 2007 early in the morning => up and running.

 $3.\ \text{O/S}$ and oracle patching is finished on d0oral on Jan. 30, 2007. Database has been available for use since that morning.

New issues from users:

#IT 2576: using had problem in getting files from ups2s_mc170906_noMB_xx with xx>=17. Robert seemed to have no problem.

Needed to hear from the user.

 $\#IT\ 2568\colon$ it seems that somehow some TMB files (related to MC request) disappeared. Probably nothing we can do now ?

From: Angela Bellavance <bellavan@fnal.gov>

Subject: CDF SAM shift report

To: lyon@fnal.gov

Cc: illingwo@fnal.gov, genser@fnal.gov Date: Tue, 06 Feb 2007 10:03:30 -0600

Unresolved issues:

There is a tape (IA3593) stuck in a mover. It occurred over the weekend, and the last word was that someone would look at it Monday, but it's still there as of today (Tuesday).

Resolved issues:

A 48 MC files on fcdfdata133 and fcdfdata134 were showing errors, but they have been cleared. I don't know who actually did it, I just pestered the cdf-mc-ops mail list.

SAM station caf-ncaf in Italy started showning errors due to an expired certificate. When the certificate was renewed, there were still problems because the certificate authority changed. The sam_gsi_config package had to be updated (v2_2_29) and distributed to all nodes in contact with caf-ncaf. So far caf-ncaf, DCache, and the remote gateway that caf-ncaf explicitly connects to have been updated. It would be a good idea if all other nodes could be updated as well just in case.

The certificate on cafsam02 was scheduled to expired, and its certificate was updated (including a required new version of sam_gsi_config) without interruption of service.

A few tapes showed up as "bad" on the DH At A Glance page that were actually in the process of being fixed so no action was required, and they are cleared.

Other than the mover involved in the unresolved issue, four other movers went bad over the week, and were fixed.

One DCache file became corrupt on disk and had to be removed and reloaded from tape.

One diskpool door became unresponsive and was corrected by the diskpool admin within $15\ \mathrm{minutes}.$

A set of 450 files in SAM were declared as "bad" as per a request by user Tom Schwarz.

A bunch of error-message emails were received from enstore@fcdfdcache6 regarding a failure with the script "updatePoolStatus.sh". Turn out to be a mis-configuration with a test node and the notices were ignorable.

The shift guide documentation has been updated as well.

- Angela

Dr. Angela Bellavance Fermilab Computing Division Running Experiments Operations 630-840-2284 bellavan@fnal.gov

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From: Arthur Kreymer <kreymer@fnal.gov>
Subject: Minos status 2007 Feb 06
To: sam-design@fnal.gov
Cc: minos_sam_admin@fnal.gov
Date: Mon, 05 Feb 2007 17:05:43 -0600 (CST)
Minos
          Monte Carlo import continues, 2 TB so far
Enstore
DCache
           kerberos ftp for raw data logging gave incorrect SIZE status,
               for files written to 2007-02 directory, post Feb UTC.
               Condition cleared when files were written to Enstore,
               updating metadata in PNFS.
               Only shows up with Igor's client, not normal kftp.
               Experts are investigating.
SAM
            IT 1894 Need 'sam locate' in C++ API -
                                                    progress ?
Oracle
OPEN ISSUES
    IT 1894: sam locate via C++ api, for simple client needs
    IT 1979: Compiler warnings from sam_cpp_api
    IT 2071: quadratic project startup time growth (from Nov 1 2005)
PLAN
    Migration to 9940B tape can proceed anytime... when ?
    New cache space scheduled February 15
    Update sam dbservers to v8
    Complete upgrade to v10 oracle client.
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From: Anil Kumar <akumar@fnal.gov> Subject: DB News To: sam-design@fnal.gov Date: Mon, 05 Feb 2007 16:17:28 -0600 Jan 2007 Oracle Critical Patch has been released. Planning to deploy this patch along with OS patches and Listener tuning patches on d0, cdf and minos databases. Schedule : d0ofdev1 jan 30 4 hrs starting at 8AM OS and Security Patch -Done d0ofint1/d0ofprd1 - Mar 06 ORA-2000 , Security Patch and OS patches cdfofpr2 Mar 15 D0 : - On 6th Feb, d0 events db entry will be turned off. When DBA can drop the synonyms for events objects ? - created sam shifter account for Marc-Andre Pleier Alerts : Message=Tablespace [OPERATIONAL_IDX_01] is [80 percent] full Action : Added 8GB - Drop the index on data_files on file_name column - Done - v6_4 index on create_date of data_files against d0ofdev1 done - Draft Plan to remove the events : http://www-css.fnal.gov/dsg/internal/ d0_ofl_dbs/plan_to_remove_events_from_d0_of.htm - Service Request with Oracle on Full table scan Vs Index scan on data_files_param_values. Development is working on Bug Fix. Bug# 5601578 No time estimate yet for bug fix. CDF : - Alerts - Message=Tablespace [OPERATIONAL_IDX_01] is [80 percent] full Action : Added 4GB - v6_4 index on create_date of data_files against cdfofdev - done - Full cut of V6_3 pending on cdfofint and cdfofpr2. MINOS : - v6_4 index on create_date of data_files against minosdev - done

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From: David Berg <berg@fnal.gov>
Subject: enstore/dcache report
To: sam-design@fnal.gov
Cc: enstore-admin@fnal.gov
Date: Mon, 05 Feb 2007 20:37:30 -0600 (CST)
enstore/dcache report
______
Operations
   - D0 silo went offline - needed a target repainted.
   - d0ensrv1 (pnfs server) failed and was replaced
   - recycled 905 9940A tapes, working on converting them to 9940Bs
 o Enstore metadata backups are now going to both FCC on 9940B and
   GCC on LTO3 for all systems
 o LTO3 drive utilization plots now up. These are available from
   the stken plots page:
CMS: http://www-stken.fnal.gov/enstore/GCC_LTO3_CMS_Utilization.jpg
CDF: http://www-stken.fnal.gov/enstore/GCC_LTO3_CDF_Utilization.jpg
All other stken: http://www-stken.fnal.gov/enstore/GCC_LTO3_Other_Utilization.jpg
 o public dcache
    - Minos ftp transfers started to fail at the turn of the month. The
     problem is similar to ones observed in the past in Sept and Oct 2006.
     Somehow problem cleared itself after a few hours. Rob performed
     investigation, he has some preliminary theories, but nothing concrete.
Downtimes
 o Feb 15, public enstore, 2 hours(?)
   upgrade stkensrv0 (volume/file database)
   - enstore s/w update
 o Feb 15, public dcache, all day
   - reconfigure all pools to ~1 TB each
     (some files will be moved, but none should be lost)
   - 4 new pool nodes (~5 TB ea) will be split between Minos, exp-db
     (Minos keeps their existing raw data write pools;
     Minos, exp-db to no longer write to shared pools)
   - configure and turn on gPlazma for grid certificate authentication
 o Mar 6, 1st Tuesday, D0 enstore
   - enstore s/w update, should take 1/2 hour
 o Mar 15, Thursday after 2nd Wednesday, CDF enstore
   - enstore s/w update, should take 1/2 hour
Thanks,
David
> Date: Mon, 05 Feb 2007 16:53:26 -0600
> From: Adam Lyon <lyon@fnal.gov>
> Subject: SAM Ops Meeting Tuesday 9:30am Racetrack 88SAMDH
> To: sam-design@fnal.gov
> Hi,
> We're having our regular SAM Ops meeting at 9:30am on Tuesday
> (tomorrow) in the Racetrack. Call 88SAMDH to attend in spirit.
> The regular agenda is...
> 1) Project news/releases
> 2) D0
> 3) CDF
> 4) MINOS
> 5) DB
> 6) enstore/dCache
> Please send me reports by tomrorow morning before the meeting. Thank
> you and see you all tomorrow.
> --- Adam
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